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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/427,263

10/26/1999

RICHARD HANS HARVEY

(19970009) 063170.6269

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06/28/2006

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2001 ROSS AVENUE

SUITE 600

DALLAS, TX 75201-2980

EXAMINER

ALAM, SHAHID AL

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/427,263	HARVEY, RICHARD HANS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shahid Al Alam	2162	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed April 11, 2006 have been fully considered but they are not persuasive for the following reasons.
2. Applicant argues that Leung fails to teach, suggest, or disclose "storing concurrently in a first table and a second table . . . both the syntax-normalized form and the raw form of said data" and the cited reference fails to teach, suggest or disclose "storing the at least one attribute identifier in an attribute table".

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification, see MPEP 2111.

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Art Unit: 2162

In response to Applicants' argument, the cited location has nothing to do with applicant's invention). Examiner likes to point out that in the "Schering Corp. v. Geneva Pharmaceuticals Inc., 64 USPQ2d 1032 (DC NJ 2002) Decided August 8, 2002."

In the above case it is concluded that the prior art **disclosure need not be express in order to anticipate**. Even if a prior art inventor does not recognize a function of his or her process, the process can anticipate if that function was inherent. To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and **that it would be so recognized by persons of ordinary skill. Inherency is not necessarily coterminous with the knowledge of those of ordinary skill in the art.**

Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art. However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. Insufficient prior understanding of the inherent properties of a known composition does not defeat a finding of anticipation.

Contrary to the above assertion, Leung teaches at least two table as claimed. Leung, in Fig. 6, shows a table namely, "ENTRY". In the "ENTRY" table, Leung shows two elements "Norm-value" and "Raw-value". This reads on the claimed step of "storing concurrently both the normalized form and raw form of said data" as recited in claim 1, because the "Norm-value" and "Raw-value" are equated with the "normalized form" and "raw form" respectively.

Art Unit: 2162

See page 739, column 2, 1<sup>st</sup> paragraph: The "ENTRY" table holds detailed information about each directory object.

See also page 737, column 1, 2<sup>nd</sup> paragraph, lines 3 – 9: "The Directory Information Base (DIB) is a logical database composed of directory entries, each of which is a collection of information on one directory object. Each object belongs to one or more object classes."

See also page 738, column 1, 2<sup>nd</sup> paragraph: "DIBP is an object oriented database built on top of a commercial relational database management system".

Leung therefore teaches directory objects that are mapped to the attributes in a relational database in X.500-compatible system. Since Leung treats the entries in the directory as objects, each object can be mapped to one or more tables. What has been shown in Fig. 6, "ENTRY" is an exemplary table wherein both raw form data and normalized data are concurrently stored for one objects. However, such a row/table can be done for any number of objects. Thus, Leung teaches multiple tables as required by the claims.

For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by the publication, "An Object.-Oriented Approach to Directory Systems," by C.M.R. Leung, IEEE Region 10 Conference on Computer and Communications Systems, September, 1990, Hong Kong, pages 736 – 740, hereinafter, "Leung."

With respect to claims 1 and 31, Leung teaches storing data in a database comprising: obtaining both a raw form of data to be stored and a syntax-normalized form of said data; assigning at least one attribute identifier and at least one entry identifier to said data (see Figure 6; page 739, column 1, First paragraph; each record contains the system identifier of an object and each record holds the system identifier of an object and an attribute value of an attribute type of the object in both normalized and raw forms); storing concurrently in a first table (DIT) and a second table (ENTRY) the at least one entry identifier and both the syntax-normalized form and the raw form of said data (Page 738, column 2, Figure 6 and Page 739, column 1, First paragraph); and storing the at least one attribute identifier in an attribute table (page 739, column 1, first paragraph).

As to claims 2 and 32, first obtaining the raw form of data; and then generating a syntax-normalized form of data (page 738, col. 2).

As to claims 3 and 33, maintaining both the syntax-normalized and raw form of data for database searching and data retrieval (page 738, column 2, last paragraph).

As to claims 4 and 34, maintaining said raw form and syntax-normalized form of data in at least two entry tables (Figure 6 of page 738, column 2, shows tables).

As to claims 5 and 35, correlating the storage location of said raw form and said syntax-normalized form in said at least two entry tables (Figure 6 of page 738, column 2, shows tables).

As to claims 12 and 41, a method and apparatus of locating data in a database wherein the data is stored linked to a syntax-normalized form of the data and comprising the step of locating said data by searching on said syntax-normalized form of the data (page 738, column 2, Figure 6; The normalized values allow efficient value matching of all attribute types through the use of standard SQL query language).

With respect to claim 56, Leung further teaches an apparatus for transferring data in and out of a database for a directory service system wherein the data is stored in raw form and in syntax-normalized form as claimed comprising means for finding data in the database using a syntax-normalized form; and means for transferring data out of the database using a raw form (Page 738, column 2, Figure 6 and Page 739, column 1, First paragraph).

Claim 57 is essentially the same as claim 1 except it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied above.

As to claims 58 and 60, raw form as being ASN.1 formats, see Leung, page 736, column 1 and 2, Sections, "Introduction" and "Directory Systems" that detail various directory services standards.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



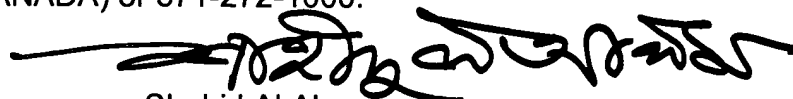
Art Unit: 2162

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid Al Alam whose telephone number is (571) 272-4030. The examiner can normally be reached on Monday-Thursday 8:00 A.M.- 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shahid Al Alam  
Primary Examiner  
Art Unit 2162

26 June 2006